INSTALLATION MANUAL

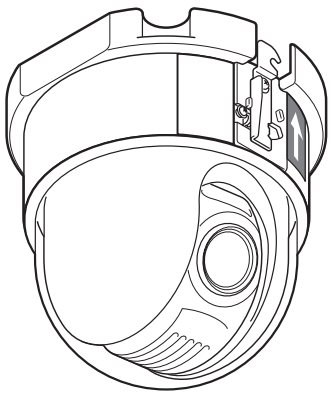
Color CCD Camera

⚠ Install these units securely according to this installation manual. Be aware that allowing them to fall may cause personal injury.

This installation should be made by a qualified service person and should conform to all local codes.

Please read this manual before installing and using this unit, and always follow the instructions in it for proper use. Please also read the separate Instruction Manual before using the unit for proper use.

English



Contents

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In-ceiling Mount (Closed Type) 3
In-ceiling Mount (Open Type) 4
Connections and Settings 5
Address Settings Table 7

Pattern Sheet (inserted at the end of this manual)

⚠ Important

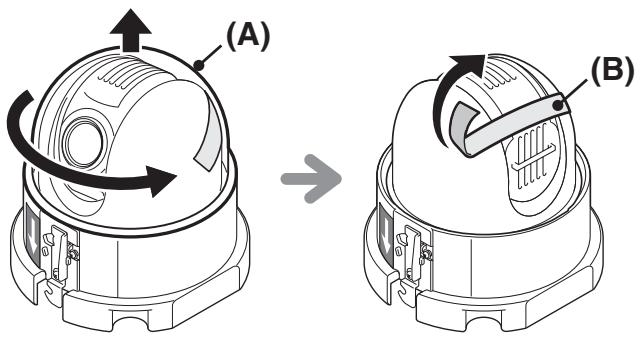
- Be careful when opening holes for installing the unit. Work with the power and video cables pulled out for easy installation.
- Make sure to properly perform waterproofing for the ceiling where you are installing the unit.
- Make sure that the surface in the installation location has no unevenness and is strong enough to bear the total weight of the unit.
- Install this unit in an environment where the temperature range stays between -10°C/+14°F and +50°C/+122°F (no condensation allowed).

CAUTION: For VA-80S (Power Borard Unit)
ALL-POLE MAINS SWITCH with a contact separation of at least 3mm in each pole shall be incorporated in the electrical installation of the building.

Before Installing the Unit

Remove the plastic cover (A) and then the tape (B) fixing the lens.

Put back the plastic cover (A), and turn it clockwise until you hear it click to securely lock it.



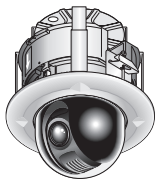
Product Lineup

To install the camera unit, the optional housing is required. When using a housing, be sure to choose the correct one for your environment of use.

Indoor Type

(In-ceiling Mount)

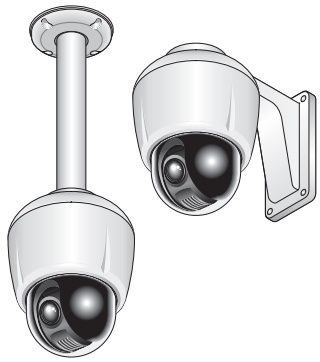
☞P3



☞P4

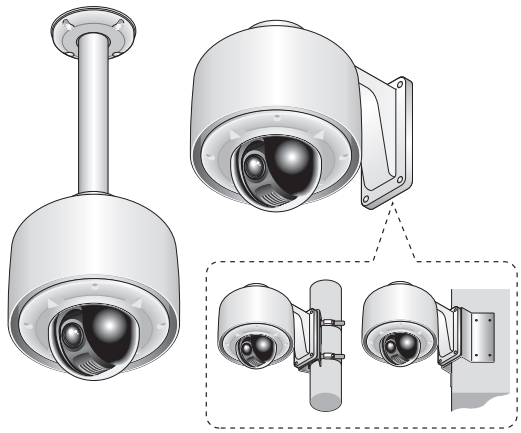
(Surface Mount)

☞P2

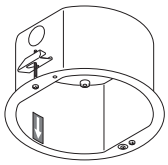


☞ Refer to the instruction manual supplied with each product.

Outdoor Type

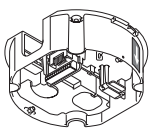


☞ Refer to the instruction manual supplied with each product.

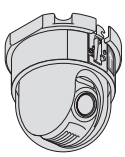


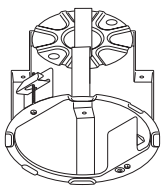
In-ceiling Bracket Closed Type

VA-80ME



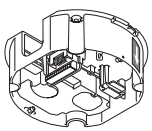
Power Board Unit (VA-84S; for AC24V) (VA-80S; for AC230V)



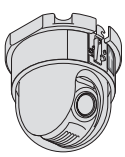


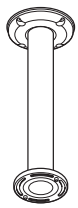
In-ceiling Bracket Open Type

VA-80MF

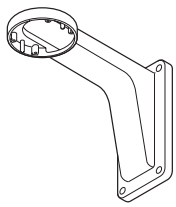


Power Board Unit (VA-84S; for AC24V) (VA-80S; for AC230V)

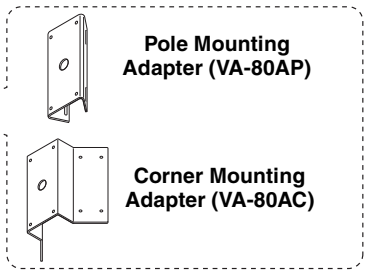


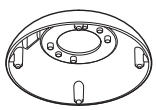


Pendant Mounting Bracket (VA-80BP)

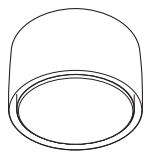


Wall Mounting Bracket (VA-80BW)

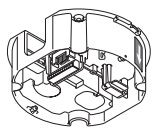




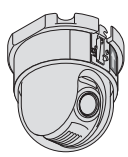
Attachment (VA-80A)

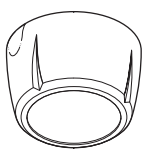


Outdoor Housing (VA-80EX)

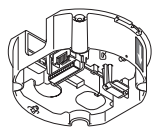


Power Board Unit (VA-84S; for AC24V) (VA-80S; for AC230V)

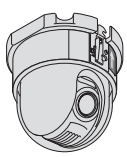


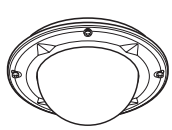


Surface Cover **VA-80F**



Power Board Unit (VA-84S; for AC24V) (VA-80S; for AC230V)





- **Clear Dome Cover (VA-CM8C)**
- **Smoked Dome Cover (VA-CM8S)**

Surface Mount

VA-80F

Make sure to also consult the Surface Cover Instruction Manual.

1. Installing the power board unit

1 Place the pattern sheet at the end of this manual on the ceiling, mark the locations and drill the holes for the cables and screws.

- Pull out the cables from the ceiling.

2 Attach the supplied dust sheet (A) to the base of the power board unit and the detachable piece of the sheet (B) to the side.

- Peel off the release-coated paper from the dust sheet before attaching.

3 Pass the cables through the slit (C) in the dust sheet.

4 Fix the power board unit to the ceiling using the supplied screws (D) (4 places).

5 Connect the cables and set the switches.

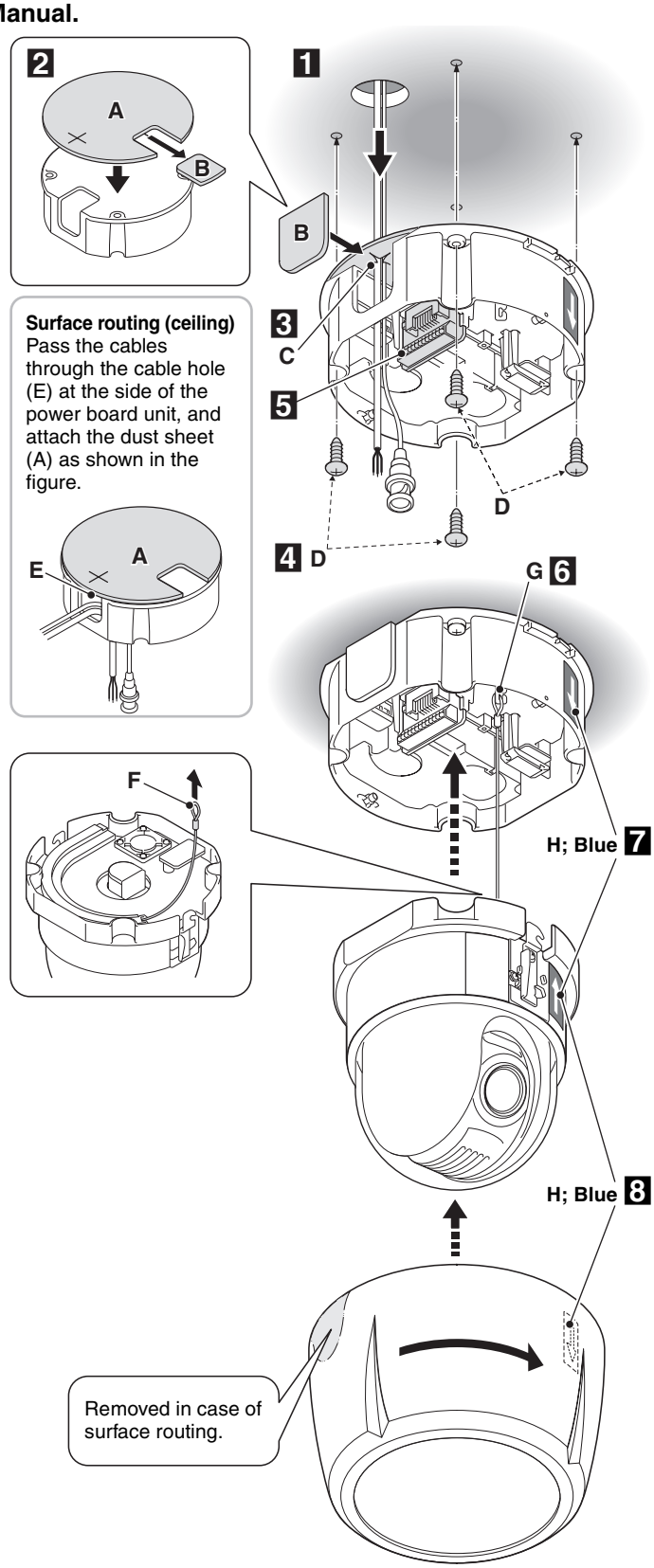
☞ See “Connections and Settings” on page 5.

2. Mounting the camera unit

6 Fasten the camera unit safety wire (F) to the hook (G) on the inner side of the power board unit.

7 Align the arrows (H) of the same color (blue) on the camera unit and the power board unit, and push the camera unit until they click.

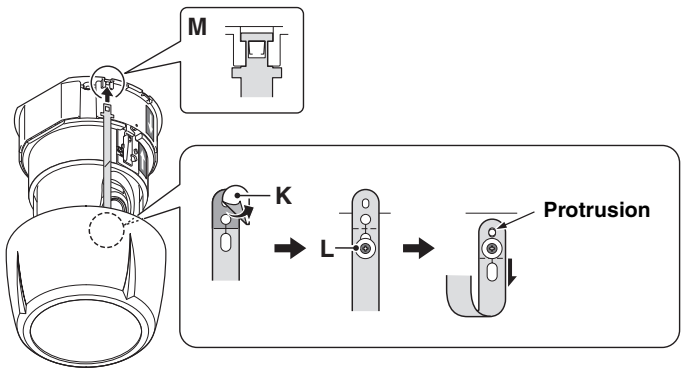
8 Align the arrows (H) of the same color (blue) on the inner side of the surface cover and the power board unit, and fix the cover by rotating it clockwise.



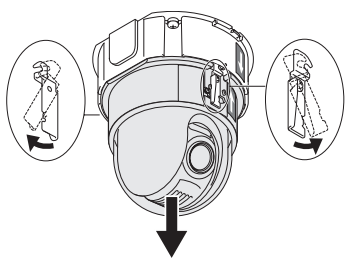
■ How to attach the drop-prevention cable (accessory)

1) Peel off the two-sided tape (K) at the end of the cable and attach it to the hook (L) on the inner side of the surface cover as shown in the figure.

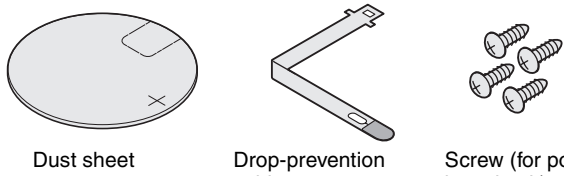
2) Fasten the cable to the hook (M) on the side of the power board unit.



■ To remove the camera unit



Accessories



Dust sheet | Drop-prevention cable | Screw (for power board unit)

In-ceiling Mount (Closed Type)

VA-80ME

Make sure to also consult the In-ceiling Bracket Closed Type Instruction Manual.

1. Installing the power board unit

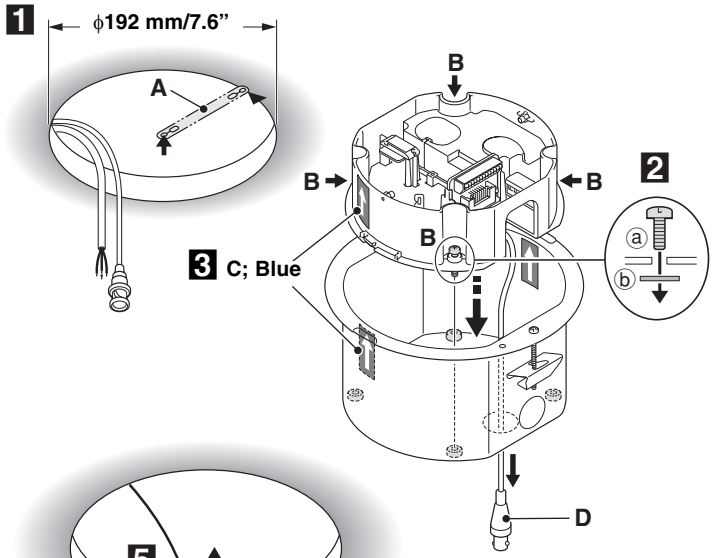
1 Draw a circumference on the ceiling using the supplied drop-prevention cable (A) as compass, and drill a hole for installing the in-ceiling bracket.

- Pull out the cables from the ceiling.

2 Pass the supplied screws ⓐ and washer ⓑ through each of the power board unit screw holes (B) and fasten them loosely using washers (4 places).

3 Align the arrows (C) of the same color (blue) on the power board unit and the in-ceiling bracket, and mount the power board unit. Tighten firmly the screws (B) loosely fastened in the previous step.

- Pass the video cable **(D)** through the bracket cable hole as preparation for the next step.



2. Installing on the ceiling

4 Attach the supplied safety wire (E) to the ceiling beam, for example, then connect it to the bracket-top hook (F).

5 Connect the video cable and pass the connection cables through the bracket.

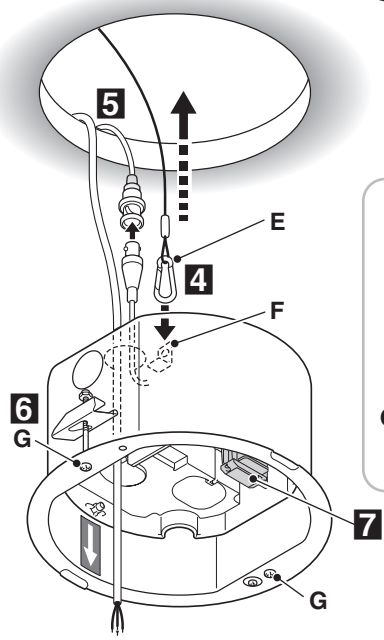
6 Insert the bracket into the ceiling hole and fix it using screws (G) (2 places).

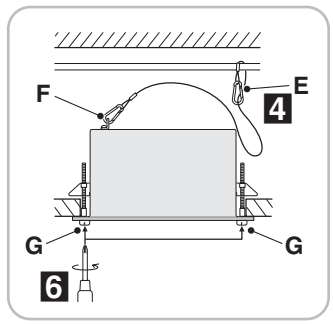
7 Connect the cables and set the switches.

☞ See “Connections and Settings” on page 5.

8 Align the arrows (C) of the same color (blue) on the camera unit and the inner side of the bracket, and push the camera unit until they click.

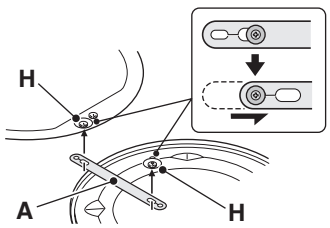
9 Align the SANYO logos on the supplied bracket cover and the bracket, and push the cover until they click.



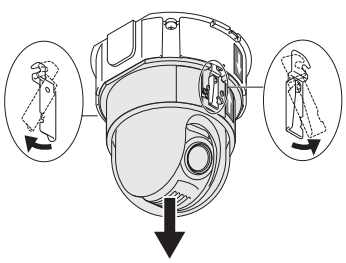


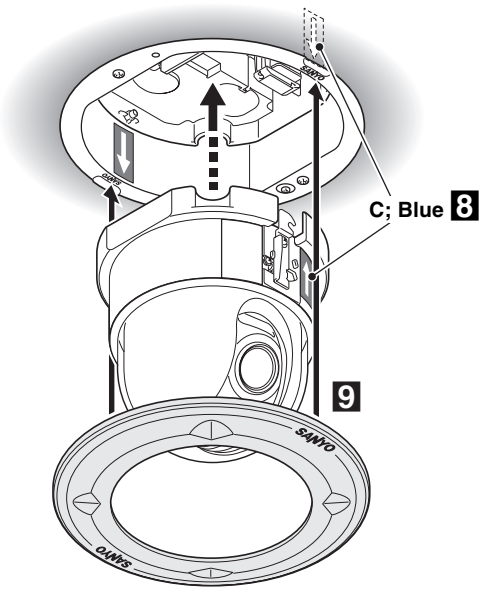
■ How to attach the drop-prevention cable (accessory)

Fasten the drop-prevention cable **(A)** to the hooks **(H)** on the bracket and its cover, then slide the cable as shown in the figure.



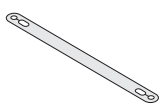
■ To remove the camera unit





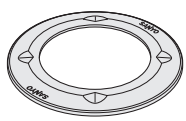
Accessories

Screw ⓐ, washer ⓑ (for power board unit)



Drop-prevention cable

Safety wire



Bracket cover

In-ceiling Mount (Open Type)

VA-80MF

Make sure to also consult the In-ceiling Bracket Open Type Instruction Manual.

1. Installing the power board unit

1 Drill a hole (ϕ196 mm/7.7") in the ceiling for installing the in-ceiling bracket.
- Pull out the cables from the ceiling.

2 Pass the supplied screws ⓐ and washer ⓑ through each of the power board unit screw holes (A) and fasten them loosely using washers (4 places).

3 Align the blue sticker (B) on the bracket and the arrow (B) of the same color on the power board unit, and then mount the power board unit in the bracket.
- When inserting the power board unit, do it diagonally.

4 Mount the power board unit in the in-ceiling bracket. Tighten firmly the screws (A) loosely fastened in the previous step.

2. Installing on the ceiling

5 Attach the supplied safety wire (C) to the ceiling beam, for example, then connect it to the bracket-top hole (D).

6 Pass the connection cables through the slit in the dust sheet (E), and connect the video cable.

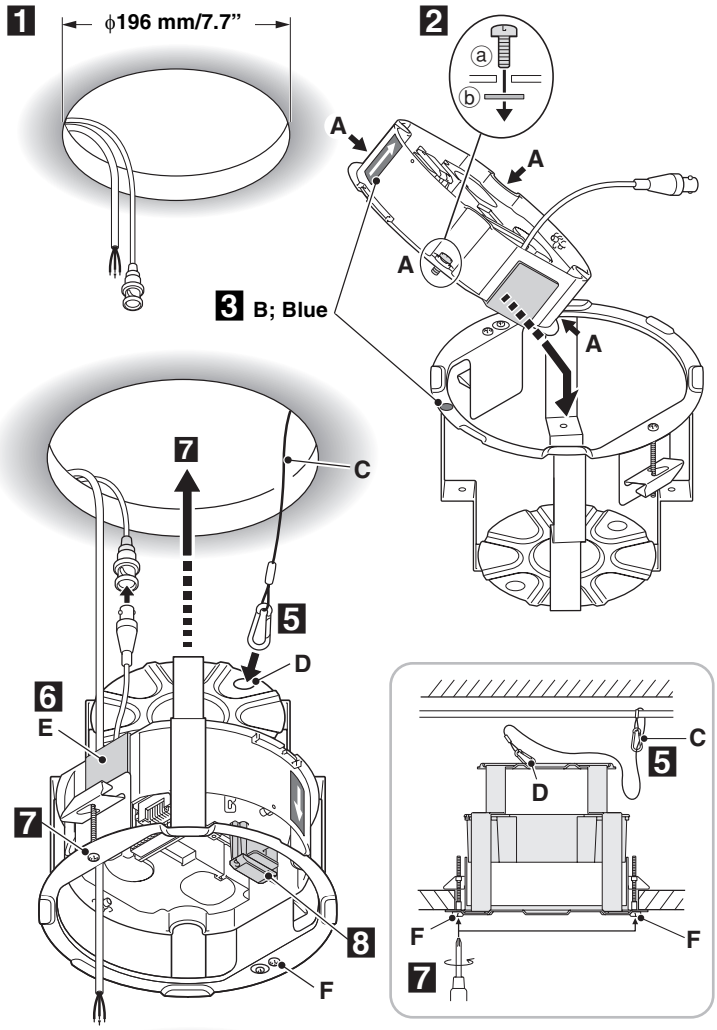
7 Insert the bracket into the ceiling hole and fix it using screws (F) (2 places).

8 Connect the cables and set the switches.

☞ See "Connections and Settings" on page 5.

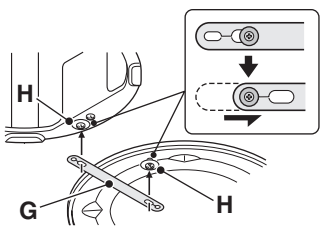
9 Align the blue sticker (B) on the bracket and the arrow (B) of the same color on the camera unit, and then push the camera unit until they click.

10 Align the SANYO logos on the supplied bracket cover and the bracket, and push the cover until they click.

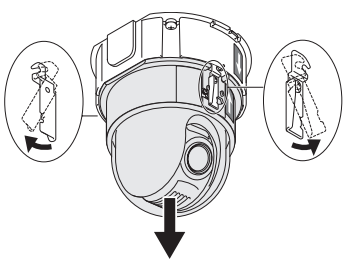


■ How to attach the drop-prevention cable (accessory)

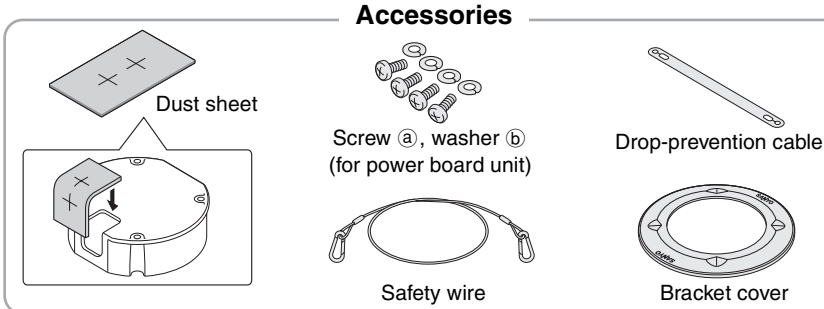
Fasten the drop-prevention cable **(G)** to the hooks **(H)** on the bracket and its cover, then slide the cable as shown in the figure.



■ To remove the camera unit



Accessories

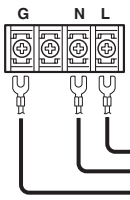


Connections and Settings

Do not connect the power cord until all other connections have been completed.

Make sure to also consult the Power Board Unit Instruction Manual.

Power Supply Connection

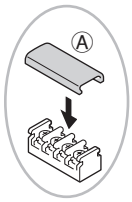


For the connections use cables higher than 18 AWG.

☞ When using AC 24 V, follow the connection steps in the leaflet titled "**Connecting the power cable**" that comes with the power board unit (VA-84S).

<Live>
<Neutral>
<Ground>
→ **AC 230 V**

- Fix the power cable end firmly so that the power terminal connection does not come loose. Use solderless terminals (ring or spade type) for wiring.
- After connection, always install the supplied power terminal cover Ⓐ for safety reasons.

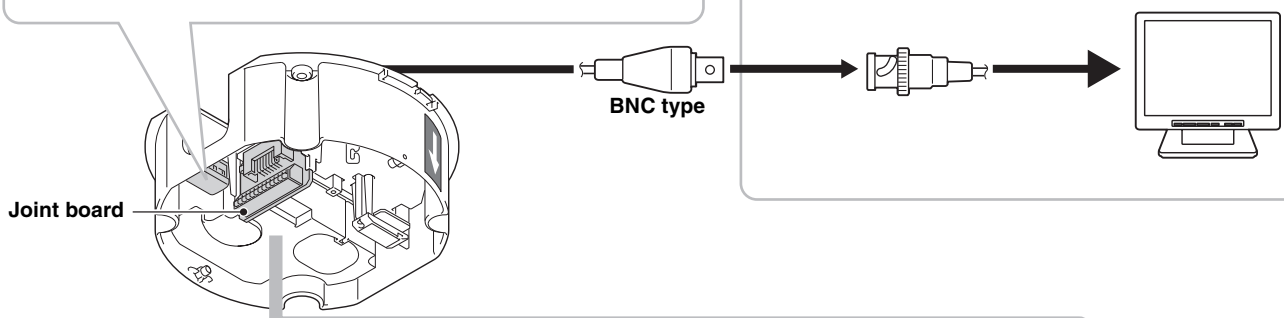


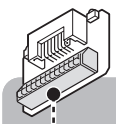
Monitor Connection

Supported coaxial cables

Cable type	Length
RG-59U (3C-2V)	250 m (273.4 yd) max.
RG-6U (5C-2V)	500 m (546.8 yd) max.
RG-11U (7C-2V)	600 m (656.2 yd) max.

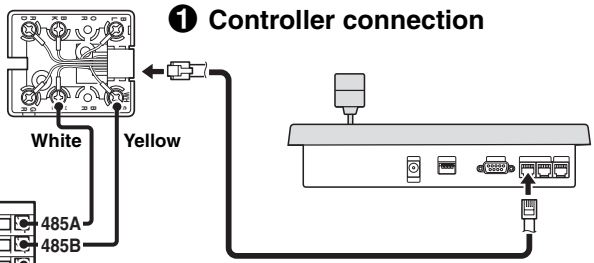
- Using different cables from those specified here may attenuate the video and/or sync signals and interfere with correct transmission.
- RG-59U coaxial cables can be used when distance between devices is short, but not in duct or aerial routing.



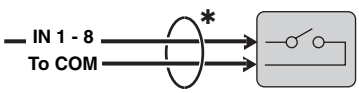


SIDE-A Connections

❶ Controller connection

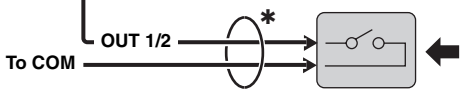


❷ Alarm signal input



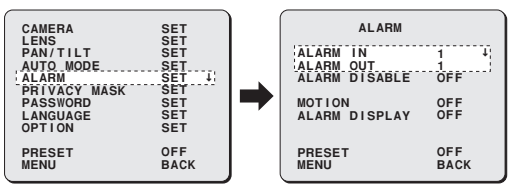
❸ Alarm signal output

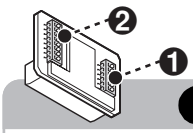
If a lamp is connected to this cable, it will light up when an alarm signal is received or when the built-in motion sensor detects movement.



∗ All connection cables should be 24 AWG or higher with a maximum length of no more than 600 m (656.2 yd).

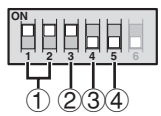
☞ For details on ❷ and ❸, refer to the "Alarm Settings (ALARM)" in the Instruction Manual.





SIDE-B Switch Settings

❶ System control setting switches



- Switch 6 is unused.
- The factory setting is represented in bold.

① Baud rate

Set the same baud rate as that on the camera.

Switch	1	2
2400	OFF	OFF
4800	ON	OFF
9600	OFF	ON
19200	**ON**	**ON**

② Control method

Set either to RS485 or coaxial (COAX).

Switch	3
Coaxial (COAX)	**ON**
RS485	OFF

③ Protocol

Set the protocol for controlling the camera.

Switch	4
SSP (SANYO)	**OFF**
PELCO	ON

④ Termination (Switch 5)

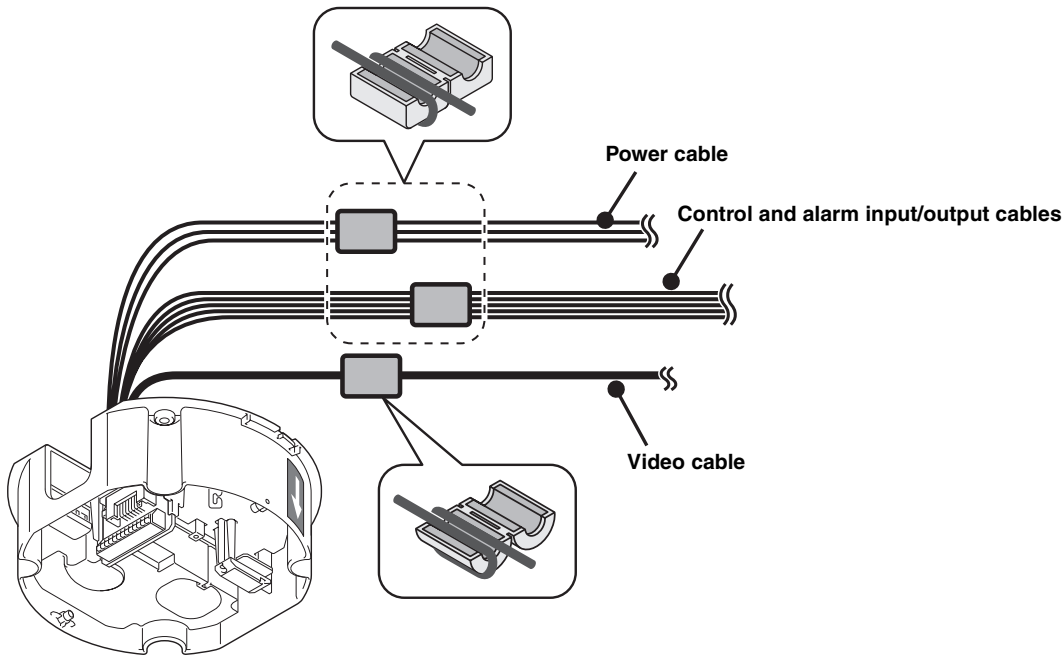
"OFF" is set by default.
When connecting multiple cameras, termination setting must be "ON" on the last camera while it must be "OFF" on all others.

❷ Address setting switches

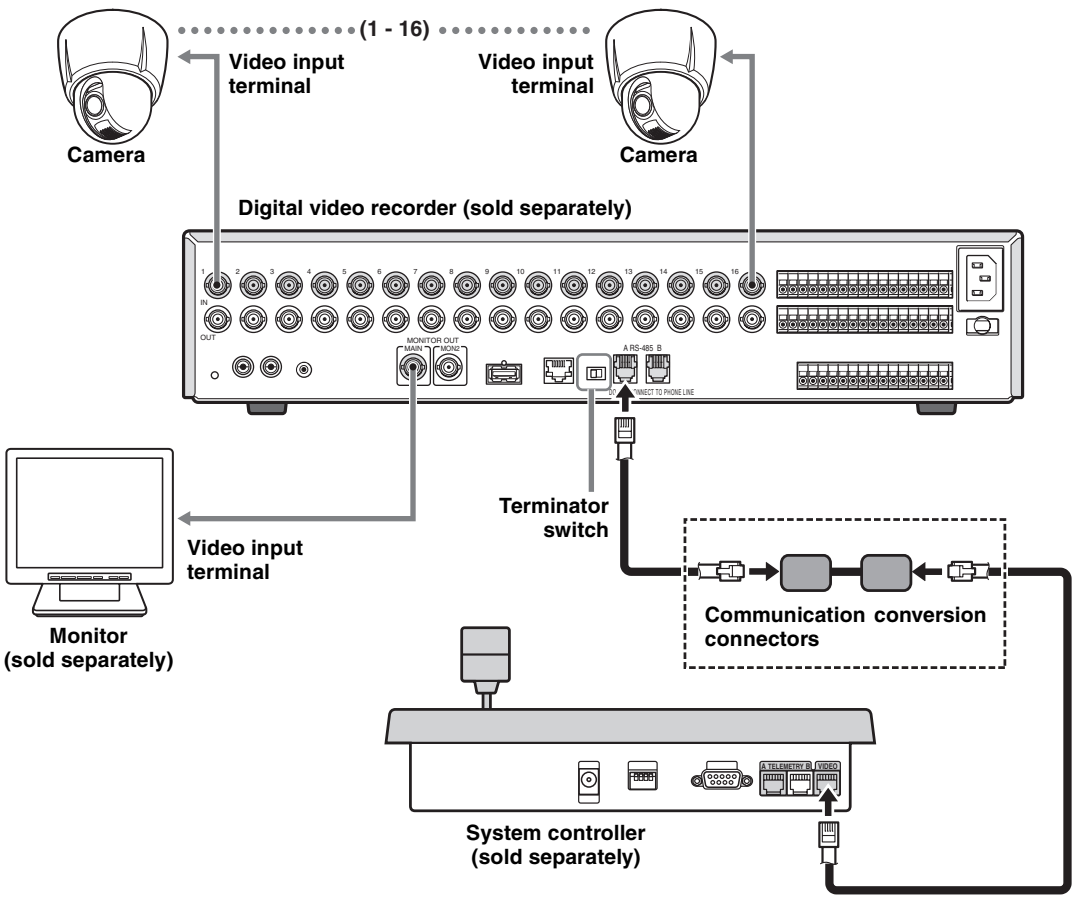
Set the camera address.
See "Address Settings Table" on page 7.

■ To prevent electromagnetic interference

Be sure to attach the clamping cores supplied with the camera unit to the cables as illustrated.



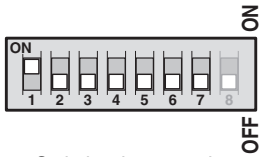
■ Connections for using coaxial control (System connection)



Address Settings Table

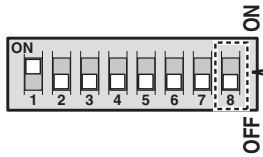
Addresses are specified by setting the switches to ON/OFF.
In the table, the circle mark "○" means ON. Set switches as shown in the table.

SANYO protocol: 1 - 127



- Switch 8 is unused.

PELCO protocol: 1 - 255



Switch 8
- **Address 1 - 127: OFF**
- **Address 128 - 255: ON**

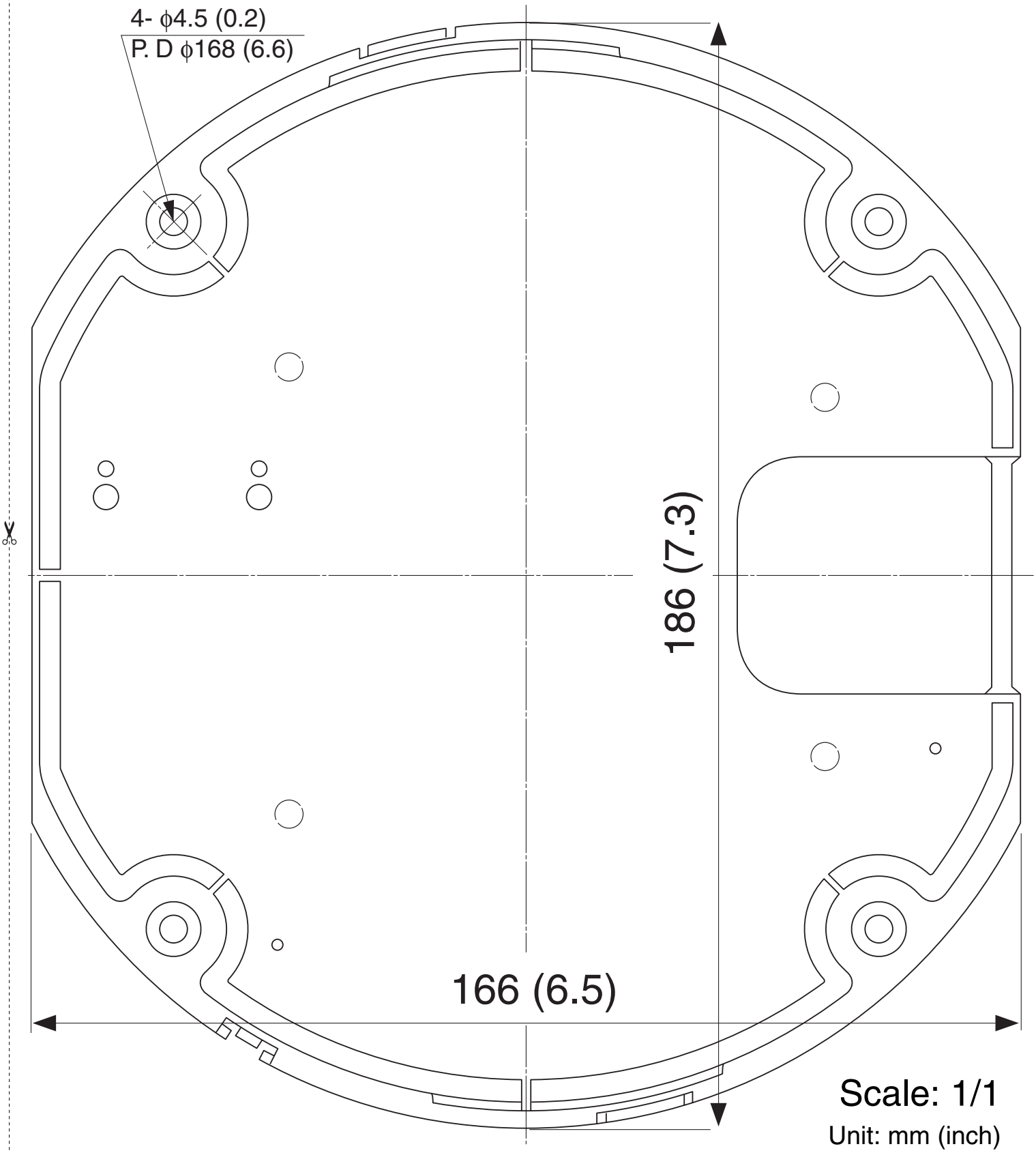
Address (Camera No.) Protocol		Switch No.						
SANYO/PELCO	PELCO	1	2	3	4	5	6	7
0*	128							
1	129	○						
2	130		○					
3	131	○	○					
4	132			○				
5	133	○		○				
6	134		○	○				
7	135	○	○	○				
8	136				○			
9	137	○			○			
10	138		○		○			
11	139	○	○		○			
12	140			○	○			
13	141	○		○	○			
14	142		○	○	○			
15	143	○	○	○	○			
16	144					○		
17	145	○				○		
18	146		○			○		
19	147	○	○			○		
20	148			○		○		
21	149	○		○		○		
22	150		○	○		○		
23	151	○	○	○		○		
24	152				○	○		
25	153	○			○	○		
26	154		○		○	○		
27	155	○	○		○	○		
28	156			○	○	○		
29	157	○		○	○	○		
30	158		○	○	○	○		
31	159	○	○	○	○	○		
32	160						○	
33	161	○					○	
34	162		○				○	
35	163	○	○				○	
36	164			○			○	
37	165	○		○			○	
38	166		○	○			○	
39	167	○	○	○			○	
40	168				○		○	
41	169	○			○		○	
42	170		○		○		○	

Address (Camera No.) Protocol		Switch No.						
SANYO/PELCO	PELCO	1	2	3	4	5	6	7
43	171	○	○		○		○	
44	172			○	○		○	
45	173	○		○	○		○	
46	174		○	○	○		○	
47	175	○	○	○	○		○	
48	176					○	○	
49	177	○				○	○	
50	178		○			○	○	
51	179	○	○			○	○	
52	180			○		○	○	
53	181	○		○		○	○	
54	182		○	○		○	○	
55	183	○	○	○		○	○	
56	184				○	○	○	
57	185	○			○	○	○	
58	186		○		○	○	○	
59	187	○	○		○	○	○	
60	188			○	○	○	○	
61	189	○		○	○	○	○	
62	190		○	○	○	○	○	
63	191	○	○	○	○	○	○	
64	192							○
65	193	○						○
66	194		○					○
67	195	○	○					○
68	196			○				○
69	197	○		○				○
70	198		○	○				○
71	199	○	○	○				○
72	200				○			○
73	201	○			○			○
74	202		○		○			○
75	203	○	○		○			○
76	204			○	○			○
77	205	○		○	○			○
78	206		○	○	○			○
79	207	○	○	○	○			○
80	208					○		○
81	209	○				○		○
82	210		○			○		○
83	211	○	○			○		○
84	212			○		○		○
85	213	○		○		○		○

Address (Camera No.) Protocol		Switch No.						
SANYO/PELCO	PELCO	1	2	3	4	5	6	7
86	214		○	○		○		○
87	215	○	○	○		○		○
88	216				○	○		○
89	217	○			○	○		○
90	218		○		○	○		○
91	219	○	○		○	○		○
92	220			○	○	○		○
93	221	○		○	○	○		○
94	222		○	○	○	○		○
95	223	○	○	○	○	○		○
96	224						○	○
97	225	○					○	○
98	226		○				○	○
99	227	○	○				○	○
100	228			○			○	○
101	229	○		○			○	○
102	230		○	○			○	○
103	231	○	○	○			○	○
104	232				○		○	○
105	233	○			○		○	○
106	234		○		○		○	○
107	235	○	○		○		○	○
108	236			○	○		○	○
109	237	○		○	○		○	○
110	238		○	○	○		○	○
111	239	○	○	○	○		○	○
112	240					○	○	○
113	241	○				○	○	○
114	242		○			○	○	○
115	243	○	○			○	○	○
116	244			○		○	○	○
117	245	○		○		○	○	○
118	246		○	○		○	○	○
119	247	○	○	○		○	○	○
120	248				○	○	○	○
121	249	○			○	○	○	○
122	250		○		○	○	○	○
123	251	○	○		○	○	○	○
124	252			○	○	○	○	○
125	253	○		○	○	○	○	○
126	254		○	○	○	○	○	○
127	255	○	○	○	○	○	○	○

*** When setting the address by using the menu screen on the camera, set the address setting switches to "0".**

Pattern Sheet

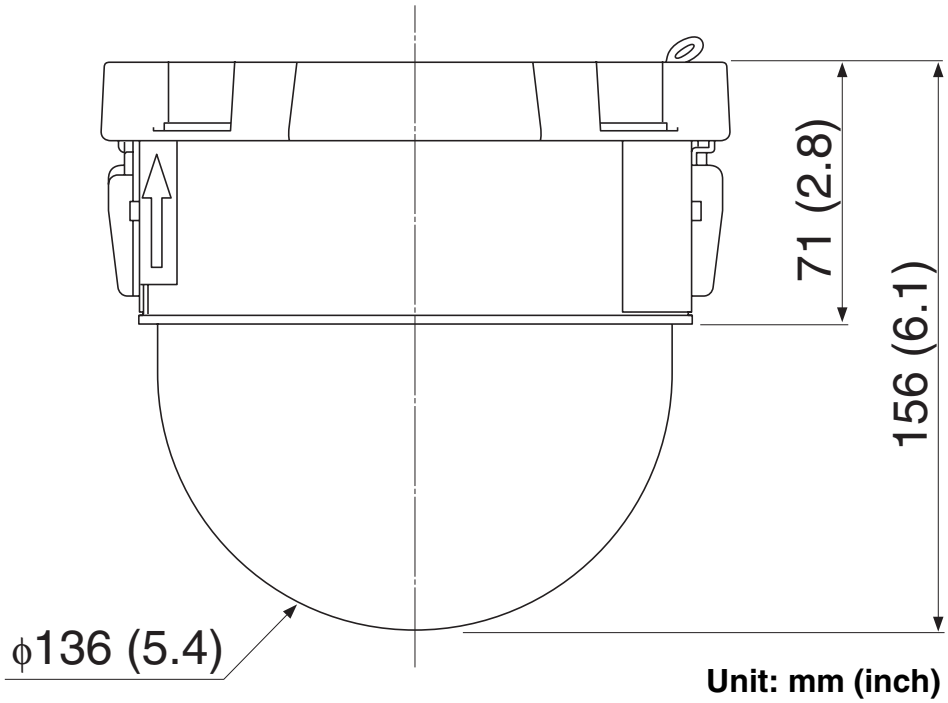


Scale: 1/1

Unit: mm (inch)

MEMO

■ Dimensions



Unit: mm (inch)

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